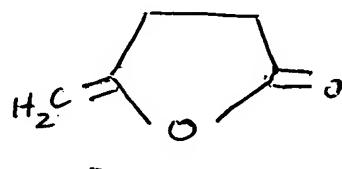
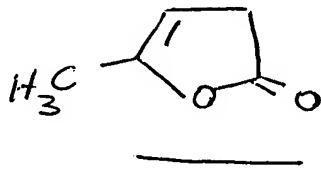


This listing of claims will replace all prior versions of claims in the application.

Claims 1-40. (cancelled)

Claim 41. (currently amended) A photoresist comprising a photoactive component and a polymer comprising a lactone moiety provided by polymerization of a monomer having a ring oxygen adjacent to a vinyl group a monomer chosen from among:



Claim 42. (cancelled)

Claim 43. (previously presented) The photoresist composition of claim 41 wherein the polymer comprises photoacid-labile groups.

Claim 44. (previously presented) The photoresist composition of claim 41 wherein the polymer further comprises a carbon alicyclic group fused to the polymer backbone.

Claim 45. (previously presented) The photoresist composition of claim 44 wherein the carbon alicyclic group is a polymerized norbornene group.

Claim 46. (previously presented) The photoresist composition of claim 41 wherein the polymer comprises a heteroalicyclic group distinct from and in addition to the lactone moiety.

Claim 47. (previously presented) The photoresist composition of claim 46 wherein the additional heteroalicyclic group comprises an oxygen ring member and/or a sulfur ring member.

Claim 48. (previously presented) The photoresist composition of claim 46 wherein the additional heteroalicyclic group has a non-hydrogen ring substituent.

Claim 49. (previously presented) The photoresist composition of claim 41 wherein the polymer comprises a polymerized acrylate that comprises a photoacid-labile moiety.

Claim 50. (previously presented) The photoresist composition of claim 41 wherein the polymer further comprises anhydride units.

Claim 51. (previously presented) The photoresist composition of claim 41 wherein the polymer is a terpolymer.

Claim 52. (previously presented) The photoresist composition of claim 41 wherein the polymer is a tetrapolymer.

Claim 53. (previously presented) The photoresist composition of claim 41 wherein the polymer is at least substantially free of aromatic groups.

Claim 54. (previously presented) The photoresist composition of claim 41 wherein the polymer is completely free of aromatic groups.

Claim 55. (previously presented) The photoresist composition of claim 41 wherein the photoactive component comprises one or more photoacid generator compounds.

Claim 56. (previously presented) The photoresist composition of claim 41 wherein the photoresist is a chemically-amplified positive-acting resist.

Claim 57. (previously presented) A method of forming a positive photoresist relief image, comprising:

- (a) applying a coating layer of a photoresist of claim 41 on a substrate; and
- (b) exposing and developing the photoresist layer to yield a relief image.

Claim 58. (previously presented) The method of claim 57 wherein the photoresist layer is exposed with radiation having a wavelength of less than about 200 nm.

Claim 59. An article of manufacture comprising a microelectronic wafer substrate having coated thereon a layer of the photoresist composition of claim 41.